WHAT IS CLAIMED IS:

1. A radiological imaging device, comprising means for emission of an X-ray beam, a means for receiving the X-ray beam after it has crossed an object to be studied, and means for calculation for controlling the means for emission and for processing data from the means for receiving, the object being capable of being placed between the means for receiving and a compression element, the compression element being capable of being removably fixed on the device, the means for calculation unit a means for optimizing the image quality over a particular area defined by the compression element.

2. The device according to claim 1, comprising a means for unit of recognition of the compression element.

3. The device according to claim 2, wherein the means for recognition unit includes at least one detection element and an adapter connected to an output of the detection element for the transfer of data from the detection element to a communication bus associated with to the device, the means for calculation unit for processing data from the means for recognition unit.

4. A radiological imaging device means for emission of an X-ray beam, a means for receiving the X-ray beam after it has crossed an object to be studied, an element presenting a given X-ray absorption capable of being removably fixed on the device, and a means for calculation for controlling the means for emission and for processing data from the means for receiving, the means for calculation including a means for optimizing the image quality over a particular area defined by the element.

5. The device according to claim 4, wherein the compression element includes a coder capable of cooperating with a the means for recognition of the compression element.

6. A radiological imaging method, in which an object compression element is mounted on a radiological device having means for emission of an X-ray beam, a means forreceiving of the X-ray beam after it has crossed the object to be studied and

means for calculation unit for controlling the means for emission and for processing data from the means for receiving, comprising the steps of: placing the object between the means for receiving and the compression element, taking a first radiological, and processing the first radiological image is in order to optimize the image quality over a particular area defined by the compression element.

7. The method according to claim 6, in which the particular area is defined by the surface of the compression element in contact with the object to be studied.

8. The method according to claim 6, in which, from a histogram of the X-rayed image (real histogram), from a mathematical model of the image chain and from the object obtained by calibration.

a) the mathematical model of the image chain and object and a set of parameters of acquisition, of the detector, of the positioner and of the object is used to determine two gray level values, min_gray and max_gray, taken in the particular area and delimiting a useful gray level area;

b) the part below min_gray and the part above max_gray is eliminated in the real histogram in order to obtain a limited histogram;

c) a set of rules is applied to the limited histogram in order to determine a WL brightness level; and

d) a WW contrast is obtained from the WL brightness level and possibly from one or more parameters chosen by the user or fixed a priori.

9. The method according to claim 7, in which, from a histogram of the X-rayed image (real histogram), from a mathematical model of the image chain and from the object obtained by calibration.

a) the mathematical model of the image chain and object and a set of parameters of acquisition, of the detector, of the positioner and of the object is used to

determine two gray level values, min_gray and max_gray, taken in the particular area and delimiting a useful gray level area;

b) the part below min_gray and the part above max_gray is eliminated in the real histogram in order to obtain a limited histogram;

c) a set of rules is applied to the limited histogram in order to determine a WL brightness level; and

d) a WW contrast is obtained from the WL brightness level and possibly from one or more parameters chosen by the user or fixed a priori.

10. A radiological imaging process, in which an element presenting a given X-ray absorption is placed on the path of an X-ray beam of a radiological device, the radiological device comprising means for emission of an X-ray beam, a means for receiving the X-ray beam after it has crossed an object to be studied and a means for calculation unit for controlling the means for emission and for processing data from the means for receiving, comprising the steps of: placing object on the path of the X-ray beam, taking a first radiological image, and processing the first radiological image in order to optimize the image quality on a particular area defined by the element.

11. Computer program including program code means for using the steps of the process according to claim 7.

12. A computer program including program codes for carrying out the steps of the process according to claim 8.

13. A computer program including program codes for carrying out the steps of the process of claim 9.

14. Support capable of being read by a reading device of program code means which are stored there and are suitable for use of the steps of the process according to claim 7.

15. Support capable of being ready by a reading device of a program code which is stored therein and suitable for carrying out the steps of claim 8.

16. Support capable of being ready by a reading device of a program code which is stored therein and suitable for carrying out the steps of claim 9.